



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,072	11/29/2000	Brian Jemes	10002170-2	8678

7590

08/23/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P. O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

NGUYEN, MINH DIEU T

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/726,072

Applicant(s)

JEMES ET AL.

Examiner

Minh Dieu Nguyen

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication dated May 18, 2005.

Claims 1-47 are pending.

Response to Arguments

2. Applicant's arguments filed May 18, 2005 have been fully considered but they are not persuasive.
3. Applicant argues that Nessett (5,968,176) fails to disclose the limitations of claims 1, 17 and 34 because Host Group One 600 and Host Group Two 610 cannot be classified as bubbles according to the definition of a bubble as provided in the instant application.

The examiner disagrees, although each end system (Fig. 6, elements 601, 602 and 603) has a NIC that is used to enforce node specific policy rules (col. 22, lines 34-37), with the multilayer firewall system as disclosed in Nessett, a router in the network enforces that part of the policy that is pertinent to those systems and network devices whose traffic might traverse the router, a switch enforces that part of the policy that is pertinent to those systems and network devices whose traffic traverses the switch, a repeater enforces that part of the policy that is pertinent to those systems and network devices whose traffic traverses the repeater, a network interface card enforces that part of the policy that is pertinent to the system or device to which it is connected (col. 3,

lines 41-50). It anticipates that each end system besides its NIC with its policy rules, shares a common network access policy (col. 22, lines 61-65). Therefore, it meets the claimed limitations and the definition of a bubble as stated in the instant application.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1, 3, 5-8, 13-14, 17, 21-22, 24, 27-29, 34, 38 and 41-44** are rejected under 35 U.S.C. 102(e) as being anticipated by Nessett et al. (5,968,176).

a) **As to claims 1 and 34**, Nessett discloses a computer network security system comprising: a plurality of network bubbles (Fig. 6, elements 600, 610), each network bubble having a plurality of bubble partitions (Fig. 6, elements 601-603), each bubble partition having at least one network device (Fig. 6, element NIC in systems 601-603) configured to transmit and receive data, and all of the network devices corresponding to at least one of the plurality of network bubbles have the same network security policy (col. 22, lines 14-17) and a plurality of network control points, each network control point including one or more network control point devices (Figure 6, elements 606, 607 and 615) having at least one interface, wherein each of the plurality

Art Unit: 2137

of bubble partitions is connected to at least one network control point to form a bubble boundary (Fig. 6), the network control point is used to provide a connection between any two network devices, and wherein at least one of the network control point devices is configured to enforce the network security policy of the network bubble that is connected to the network control point device (col. 22, lines 8-13).

b) **As to claims 3, 24 and 38**, Nessett discloses the secure network wherein each of the plurality of bubble partitions that belong to the same bubble has the same network security policy applied at each of the plurality of network control points that are connected to the plurality of bubble partitions (col. 22, lines 14-31).

c) **As to claims 5, 27 and 42**, Nessett discloses DNS is used to translate hostnames to IP addresses and IP addresses to hostnames (col. 7, line 64). It is inherently understood that each of the plurality of bubble partitions is defined by an address range.

d) **As to claims 6, 28 and 43**, Nessett discloses the secure network wherein each of the network devices in each of the plurality of bubble partitions has an address contained within the address range (col. 7, lines 56-65).

e) **As to claims 7, 29 and 44**, Nessett discloses the secure network wherein each address exists in only one of the plurality of bubble partitions (col. 8, lines 57-65).

f) **As to claims 8 and 21**, Nessett discloses the secure network wherein each of the plurality of network control points ensures source address integrity at each bubble boundary (col. 11, lines 54-62).

g) **As to claims 13, 22 and 41**, Nessett discloses the secure network wherein each network device connects to only one network control point (Fig. 6, elements 601, 604).

h) **As to claim 14**, Nessett discloses the secure network wherein the total number of network control points is greater than the number of network control points connected to any one particular bubble partitions (Fig. 6).

i) **As to claim 17**, Nessett discloses a secure network comprising a first and a second network bubble (Fig. 6, elements 600 and 610), each network bubble having a distinct network security policy and a plurality of bubble partitions, each bubble partition having a plurality of network devices (Fig. 6, element NIC in systems 601-603) configured to transmit and receive data and a plurality of network control points (Fig. 6, elements 608, 615) connecting the first network bubble to the second network bubble, each network control point having one or more network control point devices (Fig. 6, elements 606, 607, 614), each network control point device having at least one interface, wherein each bubble partition is connected to at least one and no more than

two network control points (Fig. 6) to provide a connection between a network device in the first network bubble and a network device in the second network bubble, and wherein each one of the network control point devices is configured to enforce the network security of at least one of the network bubbles (col. 22, lines 8-13).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 2, 4, 10, 23, 25, 30, 33 and 35-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nessett et al. (5,968,176) in view of Williams (6,304,973).

a) **As to claims 2, 23 and 35**, Nessett fails to disclose a secure network further comprising a plurality of inter-bubble devices.

Williams discloses a multi-level security network system further comprising a plurality of inter-bubble devices, each inter-bubble devices is configured to connect at least two of the plurality of network bubbles to one another and to enforce the network security policy of each of the plurality of network bubbles that the inter-bubble device is connected to (col. 26, lines 27-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of inter-bubble devices, as Williams teaches, in the system of Nessett so as to reduce network latency.

b) **As to claims 4, 10, 25, 30 and 36**, Nessett fails to disclose network devices in different bubble partitions of the same network bubble has unrestricted network connectivity.

Williams discloses each of the plurality of bubble partitions has unrestricted network connectivity to all other bubble partitions within the same bubble (col. 13, lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of unrestricted network connectivity to all bubble partitions within the same bubble, as Williams teaches, in the system of Nessett to increase throughput.

c) **As to claim 33**, Williams teaches a secure network further comprising an interbubble device (Fig. 14, element 18) connected to the first network bubble and the second network bubble without being connected to the plurality of network control points and configured to enforce the network security policy of the first and the second network bubble (col. 26, lines 12-59).

8. **Claims 9, 11-12, 15-16, 18-20, 26, 31-32, 37, 39-40 and 45-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nessett et al. (5,968,176) in view of Wesinger, Jr. et al. (6,052,788).

a) **As to claims 9, 26 and 47**, Nessett does not disclose each of the bubble partitions is connected to at least two network control point devices.

Wesinger discloses the secure network wherein each of the plurality of bubble partitions is connected to at least two network control point devices to achieve high availability in the case of a failed interface or network control point device (col. 12, lines 19-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of connecting each bubble partition to at least two network control point devices in the system of Nessett as Wesinger teaches to ensure the high availability in case of a failed interface or network control point device.

b) **As to claims 11, 31, 39 and 45**, Wesinger discloses the secure network wherein the plurality of network control points are coupled to one another and form a virtual backbone that is external to all of the plurality of network bubbles (Fig. 1, elements 107, 157).

c) **As to claims 12, 32, 40 and 46**, Wesinger discloses the secure network wherein each of the plurality of network control points ensure source address integrity across the virtual backbone (col. 1, lines 51-67 to col. 2, lines 1-13).

d) **As to claim 15, 18 and 37**, Wesinger discloses the secure network wherein all data transmitted from one network device to another network device traverses only one network control point (col. 3, lines 19-21).

e) **As to claims 16 and 19**, Wesinger discloses the secure network wherein all data transmitted from one network device to another network device traverses only two network control points (col. 3, lines 21-22).

f) **As to claim 20**, Wesinger discloses the secure network wherein all data transmitted from one network device in the first network bubble to another network device in the second network bubble traverses more than two network control points (col. 7, lines 37-40).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2137

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Minh Dieu Nguyen
Examiner
Art Unit 2137

mdn
8/17/05


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER